

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P310276

Luminaire Tested: **24FCZ2-55HE-UNV-L82765-RDP-CA125-W2A-U-3500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P310276
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-55HE-UNV-L82765-RDP-CA125-W2A-U-3500K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC SHEET
Light Source: (336) 3500K TUNABLE CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3322.0 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

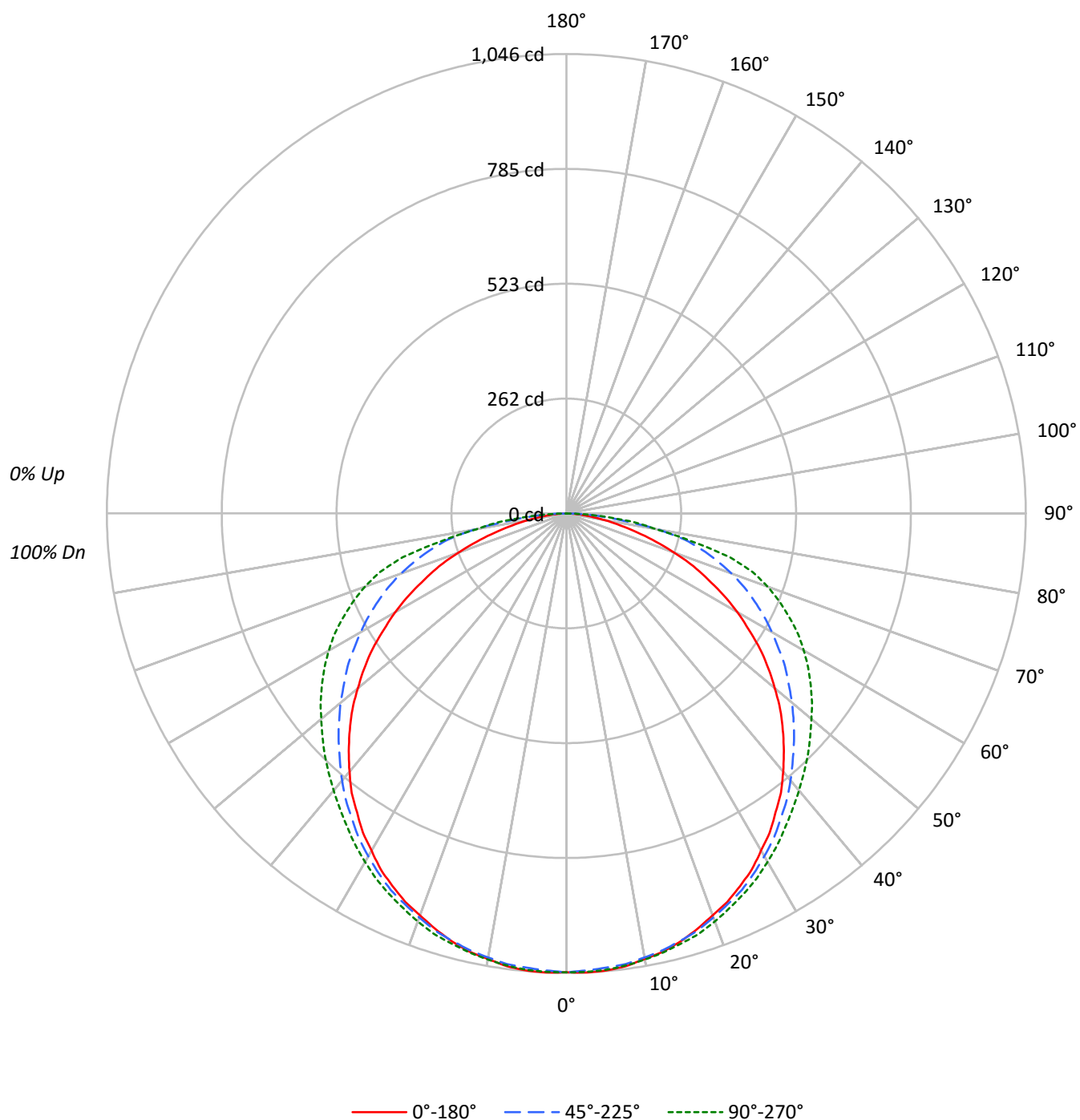
Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		67
3	88	77	68	62	86	76	67	61	72	66	60		70	64	59		56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		27
9	55	41	33	27	53	40	32	27	39	32	27		38	31	26		24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1406	1406	1406
5°	1411	1402	1409
10°	1407	1402	1409
15°	1405	1402	1412
20°	1394	1401	1416
25°	1389	1404	1419
30°	1377	1400	1423
35°	1364	1396	1429
40°	1349	1395	1447
45°	1326	1395	1480
50°	1297	1404	1524
55°	1264	1426	1593
60°	1210	1454	1681
65°	1133	1506	1784
70°	1031	1575	1919
75°	874	1662	2005
80°	690	1673	1622
85°	509	1272	1425



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	3.0
10°-20°	285.2	8.6
20°-30°	436.1	13.1
30°-40°	533.2	16.0
40°-50°	568.2	17.1
50°-60°	543.3	16.4
60°-70°	460.3	13.9
70°-80°	309.3	9.3
80°-90°	87.3	2.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	820.4	24.7
0°-40°	1353.6	40.7
0°-60°	2465.1	74.2
0°-90°	3322.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3322.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1045	1045	1045	1045	1045	
5°	1045	1043	1038	1043	1043	99
15°	1008	1008	1007	1015	1013	284
25°	936	939	946	954	956	431
35°	830	837	850	867	870	520
45°	697	708	733	765	778	538
55°	539	559	608	656	679	480
65°	356	392	473	536	560	353
75°	168	229	320	374	386	180
85°	33	68	82	89	92	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1044.7	1044.7	1044.7	1044.7	1044.7
2.5°	1046.3	1046.3	1041.4	1044.7	1044.7
5°	1044.7	1043.0	1038.1	1043.0	1043.0
7.5°	1039.7	1038.1	1034.8	1039.7	1038.1
10°	1029.8	1029.8	1026.5	1031.5	1031.5
12.5°	1021.6	1020.0	1018.3	1024.9	1023.3
15°	1008.4	1008.4	1006.8	1015.0	1013.4
17.5°	991.9	993.6	995.2	1001.8	1003.5
20°	973.8	977.1	978.8	988.7	988.7
22.5°	957.3	959.0	962.3	972.2	972.2
25°	935.9	939.2	945.8	954.0	955.7
27.5°	914.5	916.1	924.4	935.9	937.6
30°	886.5	891.4	901.3	914.5	916.1
32.5°	861.8	866.7	878.3	891.4	894.7
35°	830.5	837.1	850.2	866.7	870.0
37.5°	802.5	807.4	823.9	842.0	846.9
40°	767.9	777.7	794.2	815.6	823.9
42.5°	733.2	743.1	762.9	790.9	800.8
45°	697.0	708.5	733.2	764.6	777.7
47.5°	660.7	673.9	701.9	738.2	753.0
50°	619.6	636.0	670.6	711.8	728.3
52.5°	580.0	599.8	637.7	683.8	705.2
55°	538.8	558.6	608.0	655.8	678.9
57.5°	492.7	519.0	573.4	627.8	652.5
60°	449.8	474.6	540.5	599.8	624.5
62.5°	403.7	436.7	507.5	570.1	594.8
65°	355.9	392.2	472.9	535.5	560.2
67.5°	313.1	352.6	438.3	500.9	525.6
70°	262.0	311.4	400.4	463.0	487.7
72.5°	214.2	268.6	360.9	421.8	444.9
75°	168.1	229.0	319.7	374.0	385.6
77.5°	125.2	189.5	276.8	299.9	291.7
80°	89.0	151.6	215.9	204.3	209.3
82.5°	57.7	115.3	133.5	151.6	156.5
85°	33.0	67.6	82.4	89.0	92.3
87.5°	14.8	24.7	33.0	33.0	31.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)